

REMARKS

Claims 1-15, 22-24 are pending in this application. Claims 1, 6, 12, 22, 23 are amended; Claim 21 is canceled. The amendments to dependent claims 21-23 are so that the lens-replaceability communicated therein (as well as in the other claims) will be more clearly appreciated as a structural feature – namely, that the product is structured such that the first lens contacts other parts in an impermanent manner. The amendments to claim 1 are for clear antecedent basis for amended claims 21-24; the amendments to claims 6 and 12 are for conformity with claim 1.

At page 2 of the office action, newly submitted claims 21-24 have been treated as non-elected for seeming to be claiming an end-user process of replacing the rod lens. The claims have been amended so that this clearly cannot be said about the claims. Claim 1 now clearly recites a device which comprises either a certain first graded index rod lens or another graded index rod lens with different $A^{1/2}$. Claim 1 clearly and affirmatively recites “the replaceable first graded index rod lens being replaceably disposed contacting the optical filter”. That is, the first graded index rod lens is prohibited from being irreplaceable; for example the first graded index rod lens is prohibited from being irreplaceably or permanently disposed contacting the optical filter. Dependent claim 21 specifies the structure and composition that the device has its another graded index rod lens inserted. Dependent claim 22 specifies the structure that, whichever lens is in place, the lens “tightly contacts” the optical filter. Dependent claim 23 specifies the structure and composition that the first rod lens is in place and tightly contacts the optical filter. Dependent claim 24 specifies a particular additional part not mentioned in base claim 1, namely, “a glass tube.” That it is “a glass tube through which the first rod lens can be pulled out” communicates about the size and structure of the glass tube as well as about the positioning of the glass tube. Therefore, reconsideration and withdrawal of the treatment of dependent Claims 21-24 as non-elected are respectfully sought.

At page 3 of the office action, Claims 1, 5-7, 11-12, and 15 have been rejected under 35 USC 103(a) as being unpatentable over US Patent 6,084,994 to Li et al., in view of Kittaka et al. (US 2002/ 0140929 A1). The Examiner’s position is that the only difference between the claimed invention and Li is that “Li does not explicitly disclose an angle of the parallel light incident on the optical filter is adjusted by changing a refractive

index distribution constant of the first graded index rod lens.” (Office action, page 4.) At page 5 of the office action, Claims 2-4, 8-9 and 13-14 have been rejected under 35 U.S.C. 103(a) over a combination of three references: Li, Kittaka and Cearn.

The obviousness rejections are traversed. The primary reference, Li, is more removed from Applicants’ claimed invention than the Examiner yet admits. Applicants’ claim 1 recites a certain kind of structural contact between the index rod lens and the optical filter, namely, “the replaceable first graded index rod lens being replaceably disposed contacting the optical filter”. That is, Applicants’ claim 1 includes a structural requirement of the index rod lens “contacting” the optical filter, and includes the further structural requirement that the “contacting” be of “replaceably disposed” type. The express claim language prohibits a permanent, irreplaceable contact between the index rod lens and the optical filter. Applicants’ claim 1 prohibits the GRIN from being affixed to the optical filter as in Li.

Li fails to teach or disclose that the rod lens contacts the optical filter in a “replaceably disposed” type of contact as recited in Applicant’s claim 1. In Li, the filter 18 is affixed to the GRIN lens 16. (Col. 3, lines 39-40.) Li’s affixing (such as affixing with epoxy adhesive) the GRIN lens to the filter was what was known to a person of ordinary skill in Applicants’ art, and was a permanent affixation. It is Applicants’ own invention and entirely new to provide for the filter and GRIN lens to be in non-affixed (replaceably disposed) contact, and it was beyond the thinking of a person of ordinary skill in Applicants’ art to think to change the structural contact between the GRIN lens and the filter in the claimed manner. There must be hundreds, or more, references in which a GRIN lens is used with an optical filter and yet the Examiner has cited no reference in which the contact between the GRIN lens and the optical filter is anything other than what was known in the art of affixing the GRIN lens to the optical filter. Therefore, the obviousness rejection of the independent claims should not be maintained.

For simplicity and brevity, Applicants do not comment separately on each dependent claim. Applicants particularly note that Li clearly lacks “a glass tube through which the first rod lens can be pulled through.”

In support of the non-obviousness of Applicant’s claims, attached please find a decision of the Federal Circuit Court of Appeals in *In re Deminski*, 796 F.2d 436 (1986).

In *Deminiski*, the examiner made a final rejection (which the board affirmed), but the Federal Circuit reversed the part of the board's decision and ruled favorably regarding patentability of a claimed invention having a removable part, stating:

There is nothing in the prior art references, either singly or in combination, " 'to suggest the desirability, and thus the obviousness,' " of designing the valve assembly so that it can be removed as a unit.

Simply put, *Deminiski* solved the problem of how to remove the valve assembly by designing a compressor with four vertically oriented valve chambers. Each chamber contains a valve assembly which can be removed as a unit through the opening at the top of the valve chamber. Each of the four valve assembly units may be removed relatively easily by lifting vertically with a hoist.

Pocock teaches a pump in which only the valve stem is separately removable and replaceable. The Pocock structure requires the valve pieces to be removed item-by-item, by turning the pump upside down, by using a tool, or by hand. Because the Pocock structure is typically small, Pocock does not address *Deminiski*'s problem of how to remove a large and heavy valve assembly as a unit. Instead, Pocock teaches away from the invention of claims 17....

There was no suggestion in the prior art to provide *Deminiski* with the motivation to design the valve assembly so that it would be removable as a unit. The board argues that if Pocock had following the "common practice" of attaching the valve stem to the valve structure, then the valve assembly would be removable as a unit. The only way the board could have arrived at its conclusion was through hindsight analysis by reading into the art *Deminiski*'s own teachings.

Therefore the Federal Circuit did not permit the claims in which the valves can be removed easily for replacement to stand rejected for obviousness.

Reconsideration and withdrawal of the obviousness rejections are respectfully requested.

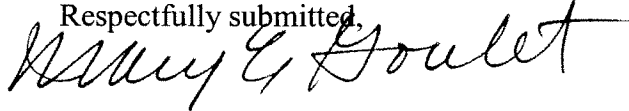
In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-15, 22-24 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone

number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees for the petition or for entry of this amendment to Attorney's Deposit Account No. 50-2041 (Whitham, Curtis & Christofferson P.C.).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mary E. Goulet". The signature is fluid and cursive, with the first name "Mary" and last name "Goulet" clearly distinguishable.

Mary E. Goulet
Reg. No. 35,884

Whitham, Curtis, & Christofferson, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA, 20190
Phone: 703-787-9400
Fax: 703-787-7557